Claims

We claim:

1   1. A display system for enhancing a retail environment, comprising:

2   a plurality of displays placed in a retail environment;

3   a plurality of sensors placed in the retail environment, the sensors

4   configured to acquire implicit characteristics of consumers;

5   a database storing content and implicit preference models; and

6   means for updating the displays with the content in real-time

7   according to the implicit characteristics of the consumers and the implicit

8   preference models.

1   2. The retail system of claim 1, in which components of the displays are

2   selected from the group consisting of projectors, audio outputs, signages,

3   controllable mannequins, models, scent generators, and combinations

4   thereof.

1   3. The retail system of claim 1, in which the sensors are selected from the

2   group consisting of proximity sensors, infrared sensors, microphones,

3   thermal sensors, cameras, touch sensors, and motion sensors.

1   4. The retail system of claim 1, further comprising:

2   determining consumer behavior in a vicinity of the displays; and

3   means for updating the displays with the content in real-time

4   according to the consumer behavior.

1 5. The retail system of claim 1, in which the implicit consumer

2 characteristics are selected from the group consisting of gender, height,

3 weight, age, and race.

1 6. The retail system of claim 1, in which the sensors acquire environmental

2 data from the retail environment.

1 7. The retail system of claim 1, in which the environmental data are selected

2 from the group consisting of weather, traffic, time, date, pricing, and sales.

1 8. The retail system of claim 1, in which the retail environment includes

2 three-dimensional structural elements, and further comprising:

3   means for projecting images on the three-dimensional structural

4 elements.

1 9. The retail system of claim 1, in which the updating precludes an explicit

2 identification of the consumers.

1 10. The retail system of claim 1, in which the updating is based on sensed

2 shopping patterns of the consumers.

1 11. The retail system of claim 1, in which the sensors acquire heart rates and

2 breathing rates of the consumers.

1 12. The retail system of claim 1, in which particular sensors are embedded in

2 the retail environment.

1   13. The retail system of claim 1, in which the content includes audio and

2   video signals.

1   14. The retail system of claim 1, in which the content is displayed according

2   to a history of interactions between the consumers and the retail

3   environment.

1   15. The retail system of claim 1, in which the content includes product

2   information.

1   16. The retail system of claim 1, in which the content modifies an

2   appearance of the retail environment.

1   17. The retail system of claim 1, in which a particular display simulates

2   theatrical lighting.

1   18. The retail system of claim 1, in which a particular display simulates

2   multiple video monitors with a single projector.

1   19. A method for enhancing a retail environment, comprising:

2   placing a plurality of displays in a retail environment;

3   placing a plurality of sensors in the retail environment, the sensors

4   configured to acquire implicit characteristics of consumers;

5   storing content and implicit preference models in a database; and

6   updating the displays with the content in real-time according to the

7   implicit characteristics of the consumers and the implicit preference models.